

1999 U.S. Dist. LEXIS 21094, \*; 53 U.S.P.Q.2D (BNA) 1463

Accordingly, the court concludes after careful review of the totality of the evidence, that Promega has met its burden of proving by clear and convincing evidence that Lifecodes' infringement of the White Patent was willful.

#### E. Enhanced Damages

[HN18] 35 U.S.C. § 284 permits a trial court to "increase the damages up to three times the amount found or assessed." [HN19] In determining whether damages should be enhanced, and to what degree, the court must bear in mind that "the remedy of enhancement of damages not only serves its primary punitive/deterrent role, but in so doing it has the secondary benefit of quantifying the equities as between patentee and infringer." *SRI Int'l*, 127 F.3d at 1468. [\*54] Courts may consider such factors as "whether there was deliberate copying, whether the infringer knew of the patent and had a good faith belief that it was invalid, the infringer's behavior as a party to the litigation, the defendant's size and financial condition, and the closeness of the willfulness issue." *Amsted Indus., Inc. v. Buckeye Steel Castings Co.*, 24 F.3d 178, 183 (Fed. Cir. 1994) (citing *Read Corp. v. Portec, Inc.*, 970 F.2d 816 (Fed. Cir. 1992)). Having considered all the factors relevant to this determination, the court concludes, based on the following reasons, that an award of treble damages is appropriate.

First, the decision that Lifecodes acted willfully was not a close decision. The court will not repeat its analysis of the evidence of Lifecodes' willfulness. Suffice it to say, this evidence led the court to a firm belief that Lifecodes recognized early on the value of the White Probes and made a calculated decision that it would use them for its own purposes. Lifecodes did not stop its infringement until finally enjoined by this court, and even then, Lifecodes prolonged its infringement as long as it could. In short, the court [\*55] concludes that Lifecodes' infringing conduct was egregious.

Second, due consideration must be given to the fact that Lifecodes has stood in Genmark's shoes since December 1991. And even while Lifecodes was intentionally violating Promega's rights under the 1990 Agreement and the patent laws, it demanded, and received, Promega's full performance under the agreement, including the payment by Promega of \$ 600,000 in royalty payments.

Third, although no specific evidence was offered concerning Lifecodes' ability to pay an enhanced damage award, much of Lifecodes' evidence was focused on proving that it had enjoyed considerable success in the human identity market. The court has therefore

concluded that Lifecodes is financially capable of paying an enhanced damage award.

Finally, Lifecodes' infringing probes are copies of the White Probe, produced from the samples sent to Lifecodes by the University in 1988.

#### F. An Award of Attorney Fees

[HN20] 35 U.S.C. § 285 authorizes the court "in exceptional cases" to award a reasonable attorney fees to the prevailing party. The right to such an award must be established by clear and convincing evidence. See *Cambridge Prod., Ltd. v. Penn Nutrients, Inc.*, 962 F.2d 1048, 1050 (Fed. Cir. 1992). [\*56] The court concludes that, for the same reasons that it found an award of treble damages was warranted, that this is an exceptional case, and Promega is entitled to its reasonable attorney fees. See *Amsted Indus.*, 24 F.3d at 184 (holding that [HN21] a finding of willful infringement is sufficient to classify a case as "exceptional" and award attorney fees). These fees, however, are restricted to Promega's fees in this lawsuit alone. The arbitration actions specifically excluded issues arising out of the patent laws and awards under § 285 are "implicitly limited" to patent cases. 7 Chisum, supra. 20-428.

#### G. Prejudgment Interest

[HN22] 35 U.S.C. § 284 permits the award of "interest . . . as fixed by the court." The Supreme Court explained that

[HN23] an award of prejudgment interest is necessary to ensure that the patent owner is placed in as good a position as he would have been in had the infringer entered into a reasonable royalty agreement. An award of interest from the time that the royalty payments would have been received merely serves to make the patent owner whole, since his damages consist not only of the value of the royalty payments [\*57] but also of the foregone use of the money between the time of infringement and the date of the judgment.

*General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 655-56, 76 L. Ed. 2d 211, 103 S. Ct. 2058 (1983). [HN24] "Prejudgment interest can only be applied to the primary or actual damage portion and not to the punitive or enhanced portion." *Underwater Devices, Inc., v.*

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*Morrison-Knudsen Co., Inc.*, 717 F.2d 1380, 1389 (Fed. Cir. 1983).

The court concludes that an appropriate rate of interest, one that would fairly compensate Promega for the loss of the use of its money, is the average prime rate for the damage period. n11 This conclusion is based on Promega's borrowing rate, which closely approximated the prime rate. (Promega's damages expert, R. Todd Nielson, testified that Promega's borrowing rate was usually prime or even less.) Further, the court notes that Mr. Nielson, in his written report stated that "at a minimum, Promega should be awarded pre-judgment interest at the prime rate compounded quarterly." (Pl.'s Ex. 122 at 3.) Finally, the prime rate is an easily ascertainable and prudent rate and one a number of courts have used. See Chisum, [\*58] supra, at 20-290 n.37.7 and cases cited therein.

n11 Lifecodes contends that Promega delayed in bringing this action and that no prejudgment interest should be awarded before February 1993 nor from May 1993 to the end of the damage period. However, the evidence indicates no undue delay on Promega's part, other than that which would be normal given the fact that this controversy has involved two separate arbitration actions and two separate lawsuits.

The court concludes that the prejudgment interest should be compounded quarterly. This conclusion is based, again, on Mr. Nielson's testimony at trial and his written report.

#### ORDER

It is hereby ordered:

1. Plaintiff shall recover from Lifecodes Corporation as damages a reasonable royalty fee. Damages shall be determined by calculating a royalty fee of 22% on sales by Lifecodes since July 9, 1991, of the White Probes, cocktails, and kits, and then subtracting the \$ 51,560.37 already awarded by the Arbitrator.

2. Plaintiffs award of damages is trebled, [\*59] due to Lifecodes' willful and egregious patent infringement.

3. Plaintiff is awarded reasonable attorney fees incurred in this lawsuit.

4. Plaintiff is awarded prejudgment interest on the actual damage portion. The interest rate shall be the average prime rate for the damage period. Prejudgment interest shall be calculated from the date this lawsuit was filed, compounded quarterly.

5. Plaintiff shall, within thirty (30) days from the date of this order, provide the court with a memorandum that calculates damages and prejudgment interest. Plaintiff, guided by *David C. v. Leavitt*, 900 F. Supp. 1547 (D. Utah 1995), shall file with the memorandum an affidavit of reasonable attorney fees incurred in this lawsuit.

6. Lifecodes shall file any opposition to plaintiff's memorandum and affidavit within thirty (30) days of plaintiff's filing of the memorandum.

DATED this 27th day of October, 1999.

BY THE COURT:

Tena Campbell

United States District Judge

LEXSEE 1995 U.S. DIST. LEXIS 5770

**ROTON BARRIER, INC., and AUSTIN R. BAER, Plaintiffs, v. THE STANLEY WORKS, Defendant.**

**No. 4:92-CV-709-CAS**

**UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MISSOURI, EASTERN DIVISION**

*1995 U.S. Dist. LEXIS 5770*

**January 27, 1995, Decided  
January 27, 1995, FILED**

**COUNSEL: [\*1]**

For ROTON BARRIER, INC., AUSTIN R. BAER, plaintiffs: Daniel R. O'Neill, Partner, David A. Roodman, Associate, Veryl L. Riddle, BRYAN CAVE, St. Louis, MO. Lawrence G. Kurland, Arthur Mann, New York, NY.

For THE STANLEY WORKS, defendant: Alan H. Norman, John K. Roedel, Jr., Senior Partner, J. Bennett Clark, Partner, SENNIGER AND POWERS, St. Louis, MO. James D. Veltrop, SKADDEN AND ARPS, Washington, DC. Peter L. Costas, PEPE AND HAZARD, Hartford, CT. Stephen M. Axinn, Constance S. Huttner, SKADDEN AND ARPS, New York, NY.

For THE STANLEY WORKS, counter-claimant: Alan H. Norman, John K. Roedel, Jr., Senior Partner, J. Bennett Clark, Partner, SENNIGER AND POWERS, St. Louis, MO. Peter L. Costas, PEPE AND HAZARD, Hartford, CT.

For ROTON BARRIER, INC., AUSTIN R. BAER, counter-defendants: Daniel R. O'Neill, Partner, David A. Roodman, Associate, Veryl L. Riddle, BRYAN CAVE, St. Louis, MO. Lawrence G. Kurland, Arthur Mann, New York, NY.

For THE STANLEY WORKS, counter-claimant: Alan H. Norman, John K. Roedel, Jr., Senior Partner, J. Bennett Clark, Partner, SENNIGER AND POWERS, St. Louis, MO. Peter L. Costas, PEPE AND HAZARD, Hartford, CT.

For ROTON BARRIER, INC., AUSTIN R. BAER, counter-defendants: Daniel R. O'Neill, Partner, David A. Roodman, Associate, Veryl L. Riddle, BRYAN CAVE, St. Louis, MO. Lawrence G. Kurland, Arthur Mann, New York, NY.

**JUDGES: CHARLES A. SHAW, UNITED STATES DISTRICT JUDGE**

**OPINIONBY: CHARLES A. SHAW**

**OPINION:**

**JUDGMENT**

In accordance with the Findings of Fact, Conclusions of Law and Order entered this date and incorporated herein,

IT IS HEREBY ORDERED, ADJUDGED and DECREED that judgment is entered in favor of plaintiffs Roton Barrier, Inc. and Austin R. Baer and against defendant The Stanley Works as follows:

(a) Trade Secret/Misappropriation Claims

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Actual Damages	\$ 2,791,677.00
Exemplary Damages	2,791,677.00

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(b) Patent Infringement Claim

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Actual Damages	129,030.00
(Treble Damages)	258,060.00
Total	\$ 5,970,444.00

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(c) Prejudgment interest

(i) Trade Secret/Misappropriation  
Claims

Prejudgment interest is awarded on the actual damage portion of this award, from July 1, 1991 to date of Judgment at the prime rate of interest, as more fully set forth in the Findings of Fact, Conclusions of Law and Order

(ii) Patent Claim

Prejudgment interest is awarded on the actual damage portion of this award, from July 1, 1991 to date of Judgment at the prime rate of interest, as more fully set forth in the Findings of Fact,

Conclusions of Law and  
Order

[\*2]

(d) Plaintiffs' attorney's fees in this matter.

IT IS FURTHER ORDERED, ADJUDGED and DECREED that defendant The Stanley Works is permanently enjoined from any further infringement of the Baer/Roton Patent No. 4,986,008 and from participating or otherwise engaging in the continuous pinless hinge business for a period of four (4) years from the date of this Judgment.

IT IS FURTHER ORDERED, ADJUDGED and DECREED that judgment is entered in favor of plaintiffs Roton Barrier, Inc. and Austin R. Baer and against defendant The Stanley Works on defendant's counterclaim.

Costs are assessed against defendant The Stanley Works.

CHARLES A. SHAW

UNITED STATES DISTRICT JUDGE

Dated this 27th day of January, 1995.

LEXSEE 1999 U.S. DIST. LEXIS 21744

**UNIQUE COUPONS, INC., Plaintiff, v. MENASHA CORPORATION and  
NORTHFIELD CORPORATION, Defendants.**

No. 96 C 7532

**UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF  
ILLINOIS, EASTERN DIVISION**

*1999 U.S. Dist. LEXIS 21744*

**August 30, 1999, Decided  
September 2, 1999, Docketed**

**DISPOSITION:** [\*1] Defendants permanently enjoined from infringing on patents; Defendants liable for royalties and prejudgment interest as detailed in Findings and Conclusions; Plaintiff entitled to costs; no attorneys fees awarded; Defendants' Motions for Directed Finding and for Judgment as a Matter of Law denied.

**CASE SUMMARY:**

**PROCEDURAL POSTURE:** Defendant manufacturers moved for the entry of directed verdict in plaintiff's patent infringement action; plaintiff sought permanent injunction of defendant's alleged use of a patented coupon-inserting device and the payment of lost profits.

**OVERVIEW:** Plaintiff, manufacturer of promotional packaging equipment, claimed that defendants infringed two patents by manufacturing and selling a machine that inserted coupons into packages. The court denied defendants' motions for directed verdict and entered judgment for plaintiff, permanently enjoining defendants from further infringement and assessing royalties and prejudgment interest against defendants. Although defendants did not literally infringe, they were liable under the doctrine of equivalents because defendants' machine contained every element of the claims of the patent and performed substantially the same function, in substantially the same way, to obtain substantially the same result. The court, however, concluded that defendants did not willfully infringe as they had relied upon competent patent counsel, before beginning sales, who believed that the machine did not infringe. Plaintiff

failed to reliably prove, however, that it was entitled to lost profits.

**OUTCOME:** The court denied defendants' motions for directed verdict and permanently enjoined defendants from further infringement, as defendants infringed under the doctrine of equivalents, defendants did not willfully infringe, therefore the court ordered the payment of royalties and prejudgment interest, but denied plaintiff's request for lost profits as they were inadequately demonstrated.

**LexisNexis(R) Headnotes**

***Patent Law > Infringement Actions > Infringing Acts > General Overview***

[HN1] A patent is infringed when a person without authority makes, uses or sells any patented invention within the United States during the term of the patent, under 35 U.S.C.S. § 271(a). In addition, whoever actively induces infringement of a patent or sells a material for use in practicing a patented process is liable as an infringer, under 35 U.S.C.S. § 271(b), (c).

***Patent Law > Infringement Actions > Burdens of Proof  
Patent Law > Inequitable Conduct > Burdens of Proof***

[HN2] Generally, in ascertaining whether a patent has been infringed, the patent owner has the burden of proof, and must meet its burden by a preponderance of the evidence standard. The preponderance of the evidence standard is met when a party provides evidence regarding a certain issue that is more convincing than the evidence offered in opposition to the issue.

***Patent Law > Infringement Actions > Doctrine of Equivalents > General Overview******Patent Law > Infringement Actions > Infringing Acts > General Overview***

[HN3] There are two recognized forms of patent infringement. First, literal infringement requires that the patent claims, as construed by the court, exist in the accused device. Second, if an accused device does not literally infringe a patent claim, infringement may be established under the doctrine of equivalents.

***Patent Law > Infringement Actions > Claim Interpretation > Scope******Patent Law > Infringement Actions > Infringing Acts > General Overview***

[HN4] Courts employ a two-step process in determining literal infringement. First, the court interprets or construes the asserted patent claims to determine their scope and meaning. Second, the court determines whether the accused device falls within the scope of the properly interpreted or construed claim.

***Patent Law > Claims & Specifications > Claim Language > Elements & Limitations******Patent Law > Infringement Actions > Infringing Acts > General Overview***

[HN5] Literal infringement exists when the claim, as construed by the court, reads on the accused device exactly. Literal infringement requires that the accused device contain each limitation of the claim exactly; any deviation from the claim precludes a finding of literal infringement. Failure to meet a single limitation is sufficient to negate infringement of a claim.

***Patent Law > Infringement Actions > Infringing Acts > General Overview***

[HN6] Infringement is not avoided by a mere reversal or transposition of parts, or a mere change in form without change in function. Similarly, infringement may not be avoided simply by adding features or components not required by the claims.

***Patent Law > Infringement Actions > Claim Interpretation > General Overview***

[HN7] It is the court's power and obligation to construe as a matter of law the meaning of language used in the patent claim.

***Patent Law > Infringement Actions > Doctrine of Equivalents > Elements > Equivalence******Patent Law > Inequitable Conduct > General Overview***

[HN8] Under the doctrine of equivalents, a product that does not literally infringe upon the express terms of a patent claim may nonetheless infringe if there is

"equivalence" between the elements of the accused product and the claimed elements of the patented invention. The determination of equivalence is an objective inquiry made on an element-by-element basis. Infringement may be found under the doctrine of equivalents if every limitation of the asserted claim, or its "equivalent," is found in the accused subject matter, where an "equivalent" differs from the claimed limitation only insubstantially. Although, the doctrine of equivalents must be applied to individual elements of the claim and not to the invention as a whole, it is not necessary that there be exact correspondence between components of the accused device and components of the claimed invention.

***Patent Law > Infringement Actions > Doctrine of Equivalents > Elements > General Overview***

[HN9] Whether a component in the accused subject matter performs substantially the same function as the claimed limitation in substantially the same way to achieve substantially the same result may be relevant to the doctrine of equivalents determination.

***Patent Law > Infringement Actions > Infringing Acts > General Overview***

[HN10] "Willful infringement" is the term designating behavior for which enhanced damages may be assessed. A finding of willfulness requires a consideration of the "totality of the circumstances," including whether or not the alleged infringer exercised due care to determine whether there is infringement.

***Patent Law > Inequitable Conduct > Effect, Materiality & Scienter > General Overview******Patent Law > Infringement Actions > Infringing Acts > General Overview***

[HN11] Where a potential infringer has actual notice of another's patent rights, he has an affirmative duty to exercise due care to determine whether or not he is infringing. Such an affirmative duty includes the duty to seek and obtain competent legal advice from counsel before the initiation of any possible infringing activity. An important factor in determining whether willful infringement has been shown is whether or not the infringer obtained the opinion of counsel. There is no willful infringement when the accused infringer reasonably relied upon an opinion of counsel, even if that opinion is ultimately proved wrong after trial. The legal opinion must, however, be "competent" or it is of little value in showing the good faith belief of the infringer. Counsel's opinion must be thorough enough to instill a belief in the infringer that a court might reasonably hold the patent is invalid, not infringed or unenforceable. Accordingly, the court's inquiry must focus on the defendants' intent and reasonable beliefs.



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***Patent Law > Remedies > Damages > General Overview***

[HN12] An increase in damages for willfulness is inappropriate where the infringers mount a good faith and substantial challenge to the existence of infringement.

***Patent Law > Remedies > Damages > General Overview***

[HN13] See 35 U.S.C.S. § 284.

***Patent Law > Infringement Actions > Burdens of Proof  
Patent Law > Remedies > Damages > Infringer Profits  
Patent Law > Remedies > Damages > Patentholder Losses***

[HN14] In determining the amount of a damage award to compensate a patent holder for infringement, the court may consider the profits the patent holder lost as a result of the infringement. The amount of lost profits cannot be based upon speculation. However, the amount need not be proven with unerring precision. The patentee must provide proof to a reasonable probability that, "but for" the infringement, it would have made the sales that were made by the infringer. To establish lost profits, the patentee must show: that there was a demand for the patented product, the absence of acceptable noninfringing substitutes, that the patentee was capable of meeting the demand, and the amount of profits lost. This guideline facilitates the determination of damages by stating conditions which allow the inference that the patentee would reasonably have made the infringer's sales.

***Copyright Law > Civil Infringement Actions > Remedies > Damages > Actual Damages******Patent Law > Remedies > Damages > General Overview***

[HN15] The total award for infringement may be mixed or split between lost profits for actual damages and a reasonable royalty based on lost sales for the remainder.

***Patent Law > Remedies > Damages > Reasonable Royalties******Patent Law > Ownership > Conveyances > General Overview******Patent Law > Infringement Actions > Infringing Acts > General Overview***

[HN16] To the extent that the patent holder cannot establish that a given sale would have been made but for the infringement, the patent holder is entitled to at least a reasonable royalty. A royalty is a payment made to the owner of a patent by a non-owner in exchange for rights to make, use or sell the claimed invention. The reasonable royalty analysis creates a hypothetical

licensing negotiation between a willing licensor and a willing licensee and determines, based upon this, what a reasonable royalty would have been agreed to. The parties are presumed to be reasonable and prudent businesspersons who are trying to reach an agreement.

***Patent Law > Ownership > Conveyances > Licenses******Patent Law > Ownership > Conveyances > Royalties******Patent Law > Remedies > Damages > Reasonable Royalties***

[HN17] The fifteen factors relevant to the determination of a reasonable royalty are: current, established royalty rates under the patent at issue; royalty rates for comparable technology; scope, exclusivity, and restrictiveness of a retroactive license; the patent holder's established licensing and marketing practices; commercial/competitive relationship of licensor and licensee; derivative/conveyed sales of unpatented, accompanying materials by patentee and competitors; duration of patent and license terms; profitability and commercial success of invention; utility and advantages of invention over prior art; nature, character, and benefits of use; extent and value of infringing use; allocation of a portion of profits or sales for use of invention; portion of realizable profits creditable to the invention alone; expert testimony on royalty rates; and the totality of other intangibles impacting a hypothetical negotiation between a willing licensor and licensee.

***Patent Law > Remedies > Damages > General Overview***

[HN18] Where an established royalty exists, it will usually be the best measure of what is a "reasonable" royalty for the purpose of calculating damages when the record does not permit actual damages to be credibly determined.

***Patent Law > Remedies > Collateral Assessments > Prejudgment Interest***

[HN19] When patent infringement has been found and damages determined, an award of prejudgment interest on the damages is the rule, not the exception. Prejudgment interest helps ensure that the patent holder is adequately compensated for the infringement and for the foregone use of the money from the date of the injury to the date of the judgment. The court is afforded wide latitude in its selection of the appropriate interest rate to be applied, and a rate above the prime rate may be used. Prejudgment interest is to be awarded from the date infringement began to the date of judgment.

**COUNSEL:** For UNIQUE COUPONS, INC., plaintiff: Greg Hugh Gardella, Foley & Lardner, James J. Lukas, Of Counsel, George S. Bosy, Harry J. Roper, Raymond N. Nimrod, John E. Titus, Roper & Quigg, Chicago, IL.

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For Plaintiff: Wayne E. Babler, Jr., Quarles & Brady, L.L.P., Milwaukee, Wisconsin.

For MENASHA CORPORATION, NORTHFIELD CORPORATION, defendants: Michael R. Dockterman, Jeffrey E. Michel, Wildman, Harrold, Allen & Dixon, Chicago, IL.

For MENASHA CORPORATION, defendant: John Sheldon Letchinger, Wildman, Harrold, Allen & Dixon, Chicago, IL.

For MENASHA CORPORATION, defendant: David Randolph Bennett, Roper & Quigg, Chicago, IL.

For MENASHA CORPORATION, NORTHFIELD CORPORATION, defendants: Nicholas A. Kees, Godfrey & Kahn, Milwaukee, WI.

For NORTHFIELD CORPORATION, MENASHA CORPORATION, counter-claimants: Michael R. Dockterman, Lauren Smith Tashma, Wildman, Harrold, Allen [\*2] & Dixon, Chicago, IL.

For NORTHFIELD CORPORATION, MENASHA CORPORATION, counter-claimants: Nicholas A. Kees, Godfrey & Kahn, Milwaukee, WI.

For UNIQUE COUPONS, INC., counter-defendant: Theodore W. Anderson, Wesley Otto Mueller, Eley O. Thompson, George Russell Thill, Leydig, Voit & Mayer, Ltd., Chicago, IL.

For UNIQUE COUPONS, INC., counter-defendant: David Randolph Bennett, Roper & Quigg, Chicago, IL.

**JUDGES:** SAMUEL P. KING, United States District Judge.

**OPINIONBY:** SAMUEL P. KING

#### **OPINION:**

#### **FINDINGS OF FACT and CONCLUSIONS OF LAW**

This is an action for patent infringement arising under the patent laws of the United States, Title 35 U.S.C. The Court has jurisdiction under 28 U.S.C. § 1338 and venue lies in this district under 28 U.S.C. § 1400(b).

This matter came before the Court for trial without a jury on June 21, 1999 through June 23, 1999. At issue is whether or not Defendant Menasha Corporation and Defendant Northfield Corporation have infringed, both

literally and under the doctrine of equivalents, Plaintiff Unique Coupons' United States Patent No. 5,079,901 ("the '901 patent") and United States Patent No. 5,588,280 ("the '280 [\*3] patent"). The parties have agreed that the representative claims in suit are claim 1 of the '901 patent and claim 20 of the '280 patent. (Tr. 10, 22). n1

n1 "SUF " designates references to the parties' statement of uncontested facts, "Tr. " designates references to the trial transcript, "JX " designates references to the parties' joint exhibits, "PX " designates references to the Plaintiff's exhibits, and "DX " designates references to the Defendants' exhibits.

This Court has examined with care the sufficiency and weight of the evidence before it, the witnesses who testified at trial, the exhibits and depositions submitted by the parties, and the post-trial memoranda submitted by counsel before it.

Pursuant to *Fed. R. Civ. P. 52(a)*, the following constitute the Court's Findings of Fact ("Findings") and Conclusions of Law ("Conclusions"). To the extent any of the Findings as stated may also be deemed to be Conclusions, they shall also be considered Conclusions. In the same [\*4] way, to the extent any of the Conclusions as stated may be deemed to be Findings, they shall also be considered Findings. See *Miller v. Fenton*, 474 U.S. 104, 114-15, 88 L. Ed. 2d 405, 106 S. Ct. 445 (1985).

#### **FINDINGS OF FACT**

##### **I. Factual Background**

1. Plaintiff Unique Coupons, Inc. ("Unique") is an Illinois corporation having its regular and established place of business in Lake Zurich, Illinois. (SUF P1).

2. Defendant Menasha Corporation ("Menasha") is a Wisconsin corporation with its regular and established place of business in Neenah, Wisconsin. Menasha's Promo Edge Division ("Promo Edge") has a regular and established place of business in Neenah, Wisconsin. (SUF P3).

3. Defendant Northfield Corporation ("Northfield") is a Wisconsin corporation with its regular and established place of business in DePere, Wisconsin and formerly with its regular and established place of business in Green Bay, Wisconsin. Northfield makes, uses, and sells the allegedly infringing Model 1600 coupon inserter at issue herein. (SUF P2).



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4. Coupon inserting equipment is used to insert coupons into packages containing household goods, e.g., cereal. The machines operate on [\*5] a continuous web of separable coupons to separate an individual coupon from the web and insert the separated coupon into a container.

5. Unique is in the business of providing its customers with promotional packaging equipment and supplies, and among other things, designs and develops coupon inserting equipment and related goods. Unique has obtained two United States patents directed to an apparatus that uses the bursting method for positioning coupons from a continuous web at a predetermined time and at a predetermined location for insertion: (1) United States Patent No. 5,079,901 awarded January 14, 1992, and (2) United States Patent No. 5,588,280 awarded December 31, 1996. (JX 1; JX 2). These are the two patents upon which Plaintiff bases its claims of infringement. These two patents name Thomas G. Kotsiopoulos as the inventor and Carol J. Witt as the sole assignee. (Tr. 51-53; JX 1; JX 2).

6. Unique currently sells several models of coupon inserters: the US301 which sells for approximately \$ 30,000, the US255 which sells for approximately \$ 15,000 to \$ 16,000, the UC201 which sells for around \$ 26,000, and the UC101 which sells for around \$ 18,000 to \$ 20,000. (Tr. 82-85). [\*6]

7. Northfield first began business as a repair and installation company servicing the promotional packaging industry, including installation and servicing of Unique's coupon inserting devices. (Tr. 486).

8. In 1995, Northfield developed and manufactured its Northfield Model 1600 coupon inserter. (Tr. 447-48). In late 1996, Northfield began selling the Model 1600 through a division of Menasha. (Tr. 494). Menasha has resold some of the Northfield inserters purchased from Northfield and has a rental program involving other inserters. (Tr. 445-51, 494).

9. Northfield typically performs the installation and maintenance on the machines sold or rented by Menasha. (Tr. 430-32).

## II. Procedural History

10. In a summary judgment decision issued September 29, 1998, Judge Marovich narrowed the issues presented by both parties in summary judgment motions. See *Unique Coupons, Inc. v. Menasha Corp. & Northfield Corp.*, 1998 U.S. Dist. LEXIS 15921, No. 96C7532, slip op. (N.D. Ill. Sept. 29, 1998) ("Order"). In particular, Judge Marovich concluded that the '901 patent and the '280 patent are valid and enforceable patents; narrowing the issues of litigation to infringement. See *id.* at 14, 28-29.

11. In other words, [\*7] the only issue that remained for trial was whether the '901 patent or the '280 patent were infringed, either literally or under the doctrine of equivalents.

## III. The Patents-in-Suit

12. The '901 and '280 patents-in-suit are directed toward a coupon apparatus that uses a "bursting method" to deliver coupons, one at a time, to moving containers as those containers move past a predetermined location.

13. Claim 1 of the '901 patent claims:

A method for positioning coupons, one at a time, at a predetermined location at a predetermined time, each of said coupons having a leading edge and a trailing edge, said coupons being provided as a stream of coupons in a continuous web with a forwardmost coupon having its trailing edge connected to the leading edge of the next coupon in said continuous web by a weakened web portion extending transversely of said web, and such successive coupon being similarly connected in said web, said method comprising the steps of:

providing a timing signal related to said predetermined time at which said forwardmost coupon is to be positioned at said predetermined location;

sensing the presence of and the absence of a coupon at a sensing position [\*8] along a coupon path relative to said predetermined location;

advancing said continuous web along said coupon path toward said predetermined location in response to said timing signal and sensing the presence of said forwardmost coupon at said sensing position;

bursting said forwardmost coupon from the next coupon in said continuous web along said weakened web portion while at least a portion of said forwardmost coupon is at said coupon sensing position;

moving said forwardmost coupon toward said predetermined location at a predetermined speed, whereby said forwardmost coupon is positioned relative

to said predetermined location at said predetermined time; and

arresting travel of said continuous web upon the sequential sensing of the absence of said forwardmost coupon and then the presence of the next succeeding coupon at said sensing position.

14. Claim 20 of the '280 patent claims:

A method of delivering coupons, one at a time, to moving containers as the containers move past a predetermined point of insertion, the coupons being provided in a continuous web wherein a trailing edge of a forwardmost coupon is detachably connected to a leading edge of a successive coupon [\*9] by a weakened separable portion therebetween and wherein each coupon after the successive coupon is similarly connected in the web, the method thereby manufacturing containers having coupons therein and comprising the steps of:

sensing the movement of the containers relative to the predetermined point of insertion and generating a timing signal based upon the movement of the containers, the timing signal pertaining to when one of the containers will be at the predetermined point of insertion;

sensing the presence and absence of the forwardmost coupon at a sensing position and generating a sensing signal pertaining thereto;

providing a coupon separation and delivery subassembly between the continuous web of coupons and the predetermined point of insertion, the subassembly including feed rolls and positioning rolls, the positioning rolls disposed downstream of the feed rolls;

advancing the continuous web of coupons utilizing the feed rolls;

providing a first output signal based in part upon the timing signal and the sensing signal; and

separating the forwardmost coupon from the successive coupon in response to the first output signal and delivering the forwardmost coupon to one [\*10] of the moving containers as said container

moves past the predetermined point of insertion.

15. Joyce Witt, president and owner of Unique Coupons, testified that an important result of the invention as embodied in the '901 and '280 patents is the bursting technology which discloses a burster device for separating a continuous web, or bandolier, of coupons, facilitating rapid and efficient insertion of coupons into containers. (Tr. 53-54). The bursting technology was critical to the design because prior techniques, e.g., stack-feed and knife-cut machines, had problems with waste (75-85% insertion rate), high operator involvement, and reduced productivity on the production lines. (Tr. 50-51, 410-11). Additionally, with the knife-cut machines there was a concern that the knives would chip or break, potentially dropping metal fragments into the food. (Tr. 48-50).

16. The patented invention embodied in the '901 and '280 patents met with a positive industry response and was commercially successful, in large part because of the high speed the bursting technology offered. (Tr. 54). After the patents issued, Unique designed at least three new models, the UC201, US301, and US255, using [\*11] its proprietary technology. (Tr. 55).

#### IV. The Northfield Device

17. The Northfield Model 1600 has a frame to which a motor, feed rollers, burst rollers, a power transmission including a clutch/brake, a control unit, an activation sensor and a deactivation sensor, and idler rollers with conveyor bands are connected. (DX 22 at 21-22).

18. Design of the Northfield device began as a result of Northfield's experience with the shortcomings and failures of coupon inserting devices in the market over time. (Tr. 443-44). Actual development of the Northfield Model 1600, and earlier prototypes, incorporating the bursting function, began after Northfield ceased service work for Unique. (Tr. 447).

19. In 1995, Northfield contacted and consulted with a patent attorney upon completion of the first prototype. (Tr. 448-50). Northfield received correspondence from its attorney to the effect that the Model 1600 did not infringe Unique's patents. (Tr. 448-57). Northfield applied for, and was issued, United States Patent No. 5,845,462 for its Model 1600 device. (Tr. 456; DX 2).

#### CONCLUSIONS OF LAW

1. This Court has jurisdiction over the parties and the subject matter, and venue is proper. [\*12]

2. The patents in suit, the '901 and '280 patents, were determined in the Court's previous ruling to be good and valid in law, and enforceable. See Order at 14.

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3. [HN1] A patent is infringed when a person "without authority makes, uses or sells any patented invention within the United States during the term of the patent . . . ." 35 U.S.C. § 271(a). Accordingly, to establish infringement of the '901 and '280 patents, Unique must demonstrate that Menasha and/or Northfield have made, used, or sold the Model 1600, and that it comes within the scope of the claimed inventions. See *Reese v. Elkhart Welding & Boiler Works, Inc.*, 447 F.2d 517, 527 (7th Cir. 1971); *University of Illinois Found. v. Block Drug Co.*, 133 F. Supp. 580, 584 (E.D. Ill. 1955), *aff'd*, 241 F.2d 6, 14 (7th Cir. 1957), *cert. denied*, 354 U.S. 922, 1 L. Ed. 2d 1437, 77 S. Ct. 1382 (1957). In addition, whoever actively induces infringement of a patent or sells a material for use in practicing a patented process is liable as an infringer. See 35 U.S.C. § 271(b),(c).

4. [HN2] Generally, in ascertaining whether a [\*13] patent has been infringed, the patent owner has the burden of proof, and must meet its burden by a preponderance of the evidence standard. See *Smithkline Diagnostics, Inc. v. Helena Lab. Corp.*, 859 F.2d 878, 889 (Fed. Cir. 1988) (citations omitted). The preponderance of the evidence standard is met when a party provides evidence regarding a certain issue that is more convincing than the evidence offered in opposition to the issue. See *Hale v. Dep't of Trans., F.A.A.*, 772 F.2d 882, 885 (Fed. Cir. 1985) (citations omitted).

5. [HN3] There are two recognized forms of patent infringement. First, literal infringement requires that the patent claims, as construed by the court, exist in the accused device. See *Read Corp. v. Portec, Inc.*, 970 F.2d 816, 821 (Fed. Cir. 1992). Second, if an accused device does not literally infringe a patent claim, infringement may be established under the doctrine of equivalents. See *id.*; *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 137 L. Ed. 2d 146, 117 S. Ct. 1040 (1997).

#### I. Literal Infringement

6. [HN4] Courts employ a two-step process in determining literal infringement. [\*14] First, the court interprets or construes the asserted patent claims to determine their scope and meaning. Second, the court determines whether the accused device falls within the scope of the properly interpreted or construed claim. See *Kahn v. General Motors Corp.*, 135 F.3d 1472, 1476 (Fed. Cir. 1998); *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 134 L. Ed. 2d 577, 116 S. Ct. 1384 (1996); *Dolly, Inc. v. Spalding & Evenflo Co.*, 16 F.3d 394, 397 (Fed. Cir. 1994).

7. [HN5] Literal infringement exists when the claim, as construed by the court, reads on the accused device exactly. See *Engel Indus., Inc. v. Lockformer Co.*, 96

F.3d 1398, 1405 (Fed. Cir. 1996). In other words, to establish literal infringement, Unique must demonstrate that every element or limitation in claim 1 of the '901 patent and claim 20 of the '280 patent is literally met by the Northfield device. See *Enercon GmbH v. International Trade Comm'n*, 151 F.3d 1376, 1384 (Fed. Cir. 1998); *Litton Sys., Inc. v. Honeywell, Inc.*, 140 F.3d 1449, 1454 (Fed. Cir. 1998) ("Literal infringement requires that the accused device contain [\*15] each limitation of the claim exactly; any deviation from the claim precludes a finding of literal infringement."). Failure to meet a single limitation is sufficient to negate infringement of a claim. See *Laitram Corp. v. Rexnord, Inc.*, 939 F.2d 1533 (Fed. Cir. 1991).

8. [HN6] Infringement is not avoided by a mere reversal or transposition of parts, or a mere change in form without change in function. See *Hunt v. Armour & Co.*, 185 F.2d 722, 723 (7th Cir. 1950). Similarly, infringement may not be avoided simply by adding features or components not required by the claims. See *Loctite Corp. v. Ultraseal Ltd.*, 781 F.2d 861, 865 (Fed. Cir. 1985), *overruled on other grounds*, *Nobelpharma AB v. Implant Innovations, Inc.*, 141 F.3d 1059 (Fed. Cir. 1998).

9. [HN7] It is the court's "power and obligation to construe as a matter of law the meaning of language used in the patent claim." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 979 (Fed. Cir. 1995). Judge Marovich, in the Court's previous ruling, established the construction of the relevant claim language for claim 1 of the '901 patent and claim 20 of the '280 patent [\*16] as a matter of law. See Order at 15-17, 20-21. Thus, claim construction need not be repeated here. See *Stearns v. Beckman Instruments, Inc.*, 737 F.2d 1565, 1568 (Fed. Cir. 1984).

10. With respect to claim 1 of the '901 patent, Judge Marovich construed the claim as containing the following steps: (1) a timing signal positions the front coupon at a predetermined location, (2) the timing signal senses the presence or absence of the coupon at the sensing positioning along the coupon path relative to the predetermined location, (3) in response to the timing signal and presence of the front coupon at the sensing position, the continuous web of coupons advances along the coupon path toward the particular location, (4) the front coupon is cut from the next coupon in the web of coupons while at least a portion of the front coupon is at the coupon sensing position, (5) the front coupon moves towards the predetermined location at a predetermined speed, and (6) the continuous web stops upon the sequential sensing of the absence of the front coupons and the presence of the next succeeding coupon at the sensing position. See *id.* at 16-17.

11. The language of claim 1 of [\*17] the '901 patent does not require that the coupon sensor be located between the positioning rolls and the feed rolls. See *id.* at 18.

12. With respect to claim 20 of the '280 patent, Judge Marovich construed the claim as containing the following steps: (1) the movement of containers is sensed relative to a predetermined point of insertion and generates a timing signal (signifying when one of the containers is at the predetermined point of insertion), (2) the presence and absence of the front coupon is sensed at a sensing position and generates a sensing signal, (3) a coupon separation and delivery subassembly (including feed rolls and positioning rolls downstream of the feed rolls) is provided between the coupon web and the predetermined point of insertion, (4) the feed rolls advance the coupon web, (5) a first output signal is provided based in part upon the timing signal and sensing signal, and (6) the front coupon is separated from the successive coupon in response to the first output signal, and the front coupon is delivered to one of the moving containers as the container moves past the predetermined point of insertion. See *id.* at 20-21.

13. The language of claim 20 of [\*18] the '280 patent does not disclose any limitation whereby the feed rolls must stop rotating *after* the front coupon has separated. See *id.* at 22.

14. Having been construed, the claim elements must now be compared (or applied) to the allegedly infringing device.

15. At issue are the following elements n2 of the following claims n3:

Claim 1 of the '901 Patent--the step of "arresting travel of said continuous web upon the sequential sensing of the absence of said forwardmost coupon and then the presence of the next succeeding coupon at said sensing position."

Claim 20 of the '280 Patent--the step of "providing a first output signal based in part upon the timing signal and the sensing signal."

n2 An "element" of a claim is also referred to as a "limitation."

n3 The Court need only consider these limitations because a claim cannot be literally infringed if even a single limitation is missing in an accused device. See *Laitram*, 939 F.2d at 1534. *Becton v. Dickinson & Co. v. C.R. Bard, Inc.*, 922 F.2d 792, 798 (Fed. Cir. 1990).

[\*19]

16. Claim 1 of the '901 Patent: Claim 1 defines a method for inserting coupons into moving containers. Under step six of the claimed method, movement of the web of coupons stops upon the sequential sensing of: (1) the absence of the front coupon and (2) the presence of the next succeeding coupon at the sensing position. In other words, the Unique patent requires the sensing of the absence of the front coupon and then the sensing of the presence of the next coupon before the bursting function takes place. By contrast, the evidence consistently demonstrates that the Northfield Model 1600 arrests travel of the continuous web immediately upon the sensing of the presence of the front coupon--not upon the "sequential sensing" of both the absence of the forwardmost coupon and then the presence of the next coupon. (Tr. 556-60, 562-64; DX 22 at 22-23). Indeed, testimony at trial established that the Northfield Model 1600 is capable of starting the next burst cycle before the trailing edge of the prior coupon has cleared the coupon sensor. In particular, Mr. Craig Kuehl, Northfield's president and owner, testified and demonstrated that the Northfield device does not need to sense the [\*20] absence of the front coupon to trigger and burst the next succeeding coupon. (Tr. 469-71). As a result, the Court finds that the Northfield Model 1600 does not literally infringe claim 1 of the '901 patent.

17. Claim 20 of the '280 Patent: The Court also finds no literal infringement with respect to claim 20. Under step five of the claimed method, a first output signal is generated based on the creation of two signals: (1) a timing signal (from the container sensor--pertaining to when a container will be at a predetermined location), and (2) a sensing signal (from the coupon sensor--pertaining to the presence or absence of the forwardmost coupon at a sensing position). The claim requires that the front coupon be separated from the coupon web "in response to [this] first output signal." At trial, Unique's expert testified that under the claimed method, both signals--that from the container sensor and from the coupon sensor--are required to work in conjunction with each other to activate separation of the front coupon from the coupon web. (Tr. 194-95).

The evidence demonstrates, however, that the Northfield Model 1600 has no first output signal; there is no such "combining" of signals [\*21] to generate a first output signal. (Tr. 542; DX 22 at 24-25). Rather, in the Northfield Model 1600, a "start signal" is immediately sent to engage the clutch as soon as a container is detected (by the container sensor), without regard to information from the coupon sensor. (Tr. 198,55-62; DX 22 at 24-25). Then when the forwardmost coupon is detected at the coupon sensor, a signal is immediately sent, unrelated to the "start signal," to stop the infeed rollers and effect the burst. (Tr. 555-62; DX 22 at 24-25).



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Simply put, the Northfield Model 1600 responds only to a coupon sensing signal in stopping the infeed rollers and separating a coupon; the container sensor does not form a part of the signal process activating the separation of the front coupon from the web. Because Northfield's inserter does not generate a "first output signal" as required by claim 20 of the '280 patent, there is no literal infringement.

18. The Northfield Model 1600 does not come within the literal working of the claims of Unique's '901 or '280 patents. Accordingly, the Court concludes that Unique did not present sufficient evidence of literal infringement. Menasha and Northfield do not literally infringe either [\*22] the Unique '901 or '280 patents either directly, contributorily or by inducement.

## II. Doctrine of Equivalents

19. Plaintiff also alleges infringement under the doctrine of equivalents as first set forth in *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 609, 94 L. Ed. 1097, 70 S. Ct. 854 (1950), and discussed most recently by the United States Supreme Court in *Warner-Jenkinson Co., Inc. v. Hilton Davis Chem. Co.*, 520 U.S. 17, 137 L. Ed. 2d 146, 117 S. Ct. 1040 (1997).

20. Even if the claims of the '901 and '280 patents do not literally read on Northfield's inserter, Unique may still prove infringement under the doctrine of equivalents. [HN8] Under the doctrine of equivalents, a product that does not literally infringe upon the express terms of a patent claim may nonetheless infringe if there is "equivalence" between the elements of the accused product and the claimed elements of the patented invention. See *Warner-Jenkinson*, 520 U.S. at 21. The determination of equivalence is an objective inquiry made on an element-by-element basis. See *id.* at 40.

21. Infringement may be found under the doctrine of equivalents [\*23] if every limitation of the asserted claim, or its "equivalent," is found in the accused subject matter, where an "equivalent" differs from the claimed limitation only insubstantially. See *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 149 F.3d 1309, 1315 (Fed. Cir. 1998). Although, the doctrine of equivalents "must be applied to individual elements of the claim [and] not to the invention as a whole," it is not necessary that there be exact correspondence between components of the accused device and components of the claimed invention. See *Warner-Jenkinson*, 520 U.S. at 29; *Sitrick v. Nintendo of Am. Inc.*, 1997 U.S. Dist. LEXIS 2903, 42 U.S.P.Q.2D (BNA) 1700, 1704 (N.D. Ill. 1997).

22. Accordingly, to find infringement, this Court must assess whether the Northfield device contains elements equivalent or identical to each element or

limitation of claim 1 of the '901 patent and claim 20 of the '280 patent.

23. Plaintiff Unique asserts, and Defendants essentially do not dispute, that the Northfield Model 1600 performs the same function to obtain the same result as Unique's claimed invention. Defendants do dispute, however, [\*24] that the Northfield Model 1600 performs the function in the same way as the claimed invention. Moreover, Defendants claim that Plaintiff has failed to offer any evidence on an element-by-element basis.

Unique argues, however, that each and every element, or its equivalent, can be found in the Northfield Model 1600. In support of that proposition, Unique relies on its expert testimony, and reiterates its argument regarding literal infringement.

24. Claim 1 of the '901 Patent: Defendants claim that the Northfield Model 1600 is different from claim 1 of the '901 patent with respect to several elements. In particular, Defendants argue that the Northfield Model 1600 does not have a timing device as required by three steps of claim 1, and that there is no "sequential sensing" of the presence and then the absence of the front coupon as required by step six of the claim.

25. The claimed method begins by obtaining a "timing signal" based on the location of the package, or container. (PX 34). The coupon web is then advanced in response to this timing signal and the presence of a front coupon at a sensing position. (PX 34). Defendants claim that the Northfield Model 1600 provides no timing [\*25] signal, but that the feed rollers are immediately started upon the container sensor sensing the presence of the container.

The evidence demonstrates that the Northfield Model 1600 has an "activation" (container) sensor for sensing the presence of a container at a predetermined location, which begins rotation of the feed rollers and advances the coupon web. (DX 22). Although the Northfield Model 1600 does not have a "timing signal" per se, the sensing device used is equivalent to that in the claimed invention. Even though the Northfield Model 1600 activates the feed rolls in response to an "activation sensor," rather than a "timing signal," the Northfield 1600's sensing device performs the same purpose of sensing a container and effecting advancement of the coupon web, and is thus the functional equivalent of the claimed "timing signal." The Court finds, therefore, that the distinction between sensing functions is insubstantial for purposes of the doctrine of equivalents analysis.

26. The '901 patent also requires that the movement of the coupon web be stopped based upon the "sequential sensing" of the absence of the front coupon and then the



sensing of the presence of the next [\*26] coupon, by the coupon sensor. (PX 34). Defendants argue that the Northfield Model 1600 does not infringe under the doctrine of equivalents, because its coupon sensor only senses the presence of the front coupon and does not "sequentially sense" the absence of the same. Again, the Court finds this difference to be insubstantial. The use of a sensor which senses the presence or absence of a coupon, as opposed to the presence and then absence of a coupon is a minor change in the structure of the device. Accordingly, the Court finds, with respect to step six of claim 1 of the '901 patent, that the Northfield Model 1600's coupon sensor performs the equivalent of the claimed limitation; the two elements are equivalent.

27. After consideration of both Defendants' and Unique's arguments and expert testimony, this Court finds that any differences between the '901 patent and the Northfield Model 1600 are not substantial enough to remove them from the scope of the doctrine of equivalents. The Northfield Model 1600 contains every element of claim 1 of the '901 patent, or its equivalent, and performs substantially the same overall function, in substantially the same way, to obtain substantially [\*27] the same overall result as the claimed invention. See *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 149 F.3d 1309, 1315-16 (Fed. Cir. 1998) [HN9] ("Whether a component in the accused subject matter performs substantially the same function as the claimed limitation in substantially the same way to achieve substantially the same result may be relevant to this determination.") (citing *Warner-Jenkinson*, 520 U.S. at 39-40).

28. Claim 20 of the '280 Patent: The debate over whether the Northfield Model 1600 is equivalent to the claimed elements of claim 20 of the '280 patent boils down to one issue--whether the Northfield Model 1600 generates a "first output signal" or the equivalent.

Defendants argue that the claimed method is not infringed under the doctrine of equivalents because no combining of signals occurs in the Northfield Model 1600 to generate a "first output signal." Rather, in the Northfield Model 1600 unrelated "start" and "stop" signals are sent to engage and disengage the clutch, and ultimately effect the burst.

The distinction Defendants find between the Northfield's dual signal process, and the claimed invention's combination of [\*28] signals is not, however, sufficient to avoid a finding of equivalence. Both signal processes function to trigger the advancement of the coupon web and effect the burst. Because both processes are functionally the same, the Court finds the difference between signaling processes insubstantial.

29. Finally, the evidence consistently demonstrates that the Northfield Model 1600 performs substantially the same function, in substantially the same way, to achieve substantially the same result as the claimed invention. See *Ethicon*, 149 F.3d at 1315-16; see also *Alpex Computer Corp. v. Nintendo Co.*, 102 F.3d 1214, 1222 (Fed. Cir. 1996) (emphasizing that a doctrine of equivalents analysis "often turns on whether the accused device performs substantially the same function, in substantially the same way, to achieve substantially the same result"), cert. denied, 521 U.S. 1104, 138 L. Ed. 2d 989, 117 S. Ct. 2480 (1997). Using inputs from a container sensor and a coupon sensor, the Northfield Model 1600's feed positioning rolls are actuated in such a way as to separate or burst the first coupon from the web and project it towards a container. The [\*29] result is positioning, bursting, and placing the coupon into the container in substantially the same way as the claimed invention. (Tr. 142-43).

30. After a thorough review of all evidence and testimony presented in this case, this Court concludes that Unique has carried its burden of proving by a preponderance of the evidence that each of the six limitations of claim 1 of the '901 patent and claim 20 of the '280 patent are substantially present in the Northfield Model 1600. While the distinctions Defendants note in the manner of operation may prevent a finding that the '901 or '280 patent reads literally on the Northfield Model 1600, this Court finds that the differences are not so great as to warrant a finding of nonequivalence. Moreover, the Court finds that the Northfield Model 1600 performs the exact same function and achieves the exact same result as the '901 and '280 patents. Accordingly, Unique has made out its case of infringement; the Northfield Model 1600 infringes.

Menasha argues that even if the Northfield Model 1600 is found to be infringing, Menasha's purchases of the Model 1600 do not establish infringement. This argument is without merit. The evidence clearly showed [\*30] that Menasha actively marketed, sold and leased the Northfield product. Indeed, Mr. Buchta, Menasha's own sales manager, testified that Menasha sold at least nine (9) of the twenty-five (25) Northfield Model 1600s that it purchased (Tr. 389), and leased out the others (JX 14, 26). Northfield's Mr. Craig Kuehl testified that Menasha did all the advertising, promotion and marketing of the Northfield product. (Tr. 495). Menasha's conduct of selling, leasing and offering the infringing Northfield product for sale unquestionably constitutes infringing activities under 35 U.S.C. § 271. Accordingly, the Court finds that Menasha is therefore liable, as is Northfield, for infringing Unique's patents.

The Court therefore concludes that Plaintiff has successfully demonstrated by a preponderance of the

evidence that Defendants Menasha and Northfield have infringed Plaintiff's patents.

### III. Willful Infringement n4

n4 [HN10] "'Willful infringement' . . . is the term designating behavior for which enhanced damages may be assessed." *SRI Int'l v. Advanced Tech. Lab.*, 127 F.3d 1462, 1464 (Fed. Cir. 1997).

[\*31]

31. A finding of willfulness requires a consideration of the "totality of the circumstances," including whether or not the alleged infringer exercised due care to determine whether there is infringement. See *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1190 (Fed. Cir. 1998).

32. [HN11] Where, as here, a potential infringer has actual notice of another's patent rights, he has an affirmative duty to exercise due care to determine whether or not he is infringing. See *Milgo Elec. Corp. v. United Bus. Communications, Inc.*, 623 F.2d 645, 666 (10th Cir. 1980), cert. denied, 449 U.S. 1066, 66 L. Ed. 2d 610, 101 S. Ct. 794 (1980). Such an affirmative duty includes, among other things, the duty to seek and obtain competent legal advice from counsel before the initiation of any possible infringing activity. Indeed, it is well settled that an important factor in determining whether willful infringement has been shown is whether or not the infringer obtained the opinion of counsel. See *Ortho Pharmaceutical Corp. v. Smith*, 959 F.2d 936, 944 (Fed. Cir. 1992). There is no willful infringement when the accused infringer reasonably [\*32] relied upon an opinion of counsel, even if that opinion is ultimately proved wrong after trial. See *Kloster Speedsteel AB v. Crucible Inc.*, 793 F.2d 1565, 1579 (Fed. Cir. 1986).

33. The legal opinion must, however, be "competent" or it is of little value in showing the good faith belief of the infringer. See *SRI Int'l*, 127 F.3d at 1465. "Counsel's opinion must be thorough enough, as combined with other factors, to instill a belief in the infringer that a court might reasonably hold the patent is invalid, not infringed or unenforceable." *Ortho Pharmaceutical*, 959 F.2d at 944. Accordingly, this Court's inquiry must focus on Defendants' intent and reasonable beliefs. See *id.*; see also *Gustafson, Inc. v. Intersystems Indus. Prods.*, 897 F.2d 508, 510-11 (Fed. Cir. 1990).

34. Here, Northfield and Menasha n5 obtained and reasonably relied upon competent opinion letters rendered by counsel. Northfield began working with its patent attorney, Mr. Nicholas Kees from the law firm

Godfrey & Kahn, to attempt to avoid infringement of the Unique patent as soon as Northfield completed its first prototype. (Tr. 450-51). After conducting [\*33] the necessary patent search, counsel rendered his oral opinion of noninfringement and subsequently forwarded a written legal opinion to the effect that the Northfield Model 1600 did not infringe Unique's patent. (Tr. 454-55; JX 11). The letter relates to the '901 patent and summarizes counsel's extensive analysis and discussions regarding the firm's opinion of noninfringement. (JX 11). Northfield continued to receive correspondence from its patent attorneys, including correspondence regarding its own patent application, and there was nothing to ever indicate that the firm's infringement opinion had changed. (Tr. 456-57). On the contrary, on June 6, 1997, shortly after the instant case was filed and the '280 patent was issued, n6 Godfrey & Kahn submitted to Defendants an in-depth infringement study, reiterating its position of noninfringement under both the '901 and '280 patent. (JX 12).

n5 Menasha did not affirmatively seek an opinion from its patent counsel, but relied on the infringement opinion provided to Northfield by Godfrey & Kahn. (Tr. 379-81; JX 11).

n6 The Complaint in this case was filed on November 18, 1996. The '280 patent did not issue until December 31, 1996, after the instant lawsuit was filed.

[\*34]

35. Defendants' opinion letter was obtained from experienced patent counsel. The letter thoroughly discusses the reasons supporting counsel's conclusion of noninfringement, and emphasizes that extensive and careful analysis was conducted on the matter. Accordingly, this Court cannot find that it was unreasonable for Defendants to believe, in reliance upon counsel's opinion, that the Northfield Model 1600 did not infringe Unique's patent. As Mr. Kuehl testified, "if an expert patent attorney tells me that [the Northfield Model 1600] doesn't infringe, [and] gives me a letter and it says it doesn't infringe, I believe we're not infringing." (Tr. 455). Particularly persuasive is the fact that Defendants did not begin selling the Northfield Model 1600 until after the receipt of the infringement opinion from counsel. (Tr. 456-57). Such conduct suggests a good faith belief on the part of Defendants that they were not engaging in infringing conduct.

36. In addition, this Court finds persuasive the fact that Northfield applied for and was granted a patent for its Northfield Model 1600. "Even though its activities later constituted infringement, by relying on the issuance

of its patent, [\*35] . . . [Northfield] might reasonably have believed that its actions were protected as within its own patentably distinct claims, while falling outside the ['901 and '280] patent claims." *King Instrument Corp. v. Otari Corp.*, 767 F.2d 853, 867 (Fed. Cir. 1985). While irrelevant in an infringement analysis, this factor can be considered by the Court in determining Northfield's intent with regards to willfulness. See *id.*

37. [HN12] Finally, an increase in damages for willfulness is inappropriate where, as here, the infringers mount a good faith and substantial challenge to the existence of infringement. See, e.g., *Paper Converting Mach. Co. v. Magna-Graphics Corp.*, 745 F.2d 11, 20 (Fed. Cir. 1984); *Central Soya Co., Inc. v. Geo. A. Hormel & Co.*, 723 F.2d 1573 (Fed. Cir. 1983).

38. Unique has failed to prove by clear and convincing evidence that upon the totality of the circumstances Defendants' infringement was willful. The Court finds that the infringement by Defendants was not willful and that no circumstances exist to warrant a finding that Defendants' actions were exceptional.

#### IV. Damages

39. Due to the Court's findings, Plaintiff [\*36] Unique is entitled to the immediate issuance of permanent injunctive relief against Defendants prohibiting their distribution, marketing, and selling of infringing products. Plaintiff is also entitled to an award of damages for Menasha and Northfield's infringement of the Unique patents.

40. The applicable statutory authority for determining damages in this patent infringement case is [HN13] 35 U.S.C. § 284, which provides:

Upon finding for the claimant the court shall award the claimant damages adequate to compensate for the infringement, but in no event less than a reasonable royalty for the use made of the invention by the infringer, together with interest and costs as fixed by the court.

*Id.*

#### A. Lost Profits

41. [HN14] In determining the amount of a damage award to compensate a patent holder for infringement, the court may consider the profits the patent holder lost as a result of the infringement. See *Paper Converting*, 745 F.2d at 21.

42. The amount of lost profits cannot be based upon speculation. However, the amount need not be proven with unerring precision. See *Bio-Rad Labs., Inc. v.*

*Nicolet Instrument Corp.*, 739 F.2d 604, 615-16 (Fed. Cir. 1984). [\*37] The patentee must provide proof to a "reasonable probability that, 'but for' the infringement, it would have made the sales that were made by the infringer." *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545 (Fed. Cir. 1995) (en banc); *Yarway Corp. v. Eur-Control USA, Inc.*, 775 F.2d 268, 275 (Fed. Cir. 1985).

43. The guideline for proving lost profits was first announced in *Panduit Corp. v. Stahl Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156 (6th Cir. 1978). To establish lost profits applying the evidentiary guideline of Panduit the patentee must show: (1) that there was a demand for the patented product, (2) the absence of acceptable noninfringing substitutes, (3) that the patentee was capable of meeting the demand, and (4) the amount of profits lost. See *id.* This guideline facilitates the determination of damages by stating conditions which allow the inference that the patentee would reasonably have made the infringer's sales. See *Del Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320, 1327 (Fed. Cir. 1987).

44. [HN15] Additionally, the total award may be mixed or split between lost profits for actual [\*38] damages and a reasonable royalty based on lost sales for the remainder. See *TWM Mfg. Co., Inc. v. Dura Corp.*, 789 F.2d 895 (Fed. Cir. 1986).

45. The evidence in the record shows that Northfield, during the period of infringement, sold a total of thirty-one (31) of the Model 1600 coupon inserting machines at issue, generating total revenues of just over \$ 300,000 from these sales.

46. Unique takes the position that it would have made all of the sales that Unique made during the infringement period. The testimony of Mr. Mark Ulankiewicz, Unique's financial expert, was that Unique had the production capacity and ability to produce the additional thirty-one (31) inserters (Tr. 234-35; PX 35), and that Unique would have sold the thirty-one (31) inserters placed by Northfield (Tr. 222; PX 35). This Court notes that Unique is not claiming, as Defendants purport, that it would have made the sales to Menasha absent the infringement. Rather, Unique asserts that it would have made the additional thirty-one (31) sales to the same customers that leased or bought the infringing Northfield Model 1600 from Menasha. (Tr. 224-26, 324-27, 329).

47. To this end, Unique claims three [\*39] categories of lost profits: (1) lost sales of coupon inserters (\$ 526,473); (2) lost sales of coupons, promotions and related technical services associated with coupon inserters (\$ 692,000); and (3) lost sales of labelers and related items such as labels and technical services associated with those products (\$ 830,000). (Tr.

220-51; PX 119). On the basis of these loss categories, Unique seeks total lost profits in the amount of \$ 2,048,473. (Tr. 214-17, 251; PX 119). Mr. Ulankiewicz testified that the lost profit figures were calculated in part, by applying an estimated profit margin of 62% for each coupon inserter sold. (Tr. 231).

Additionally, the loss figure includes Unique's loss of sales for collateral goods. Unique asserts that it provides an integrated system for its customers, including coupon inserting equipment, promotions (or coupons), labels and labeling equipment and is thus entitled to lost profits on lost sales of its collateral goods. In support, both Ms. Witt and Mr. Ulankiewicz testified that Unique's customers are required to purchase two coupon promotions with each purchase of a coupon inserter, and with each lease of a coupon inserter are required to purchase [\*40] all coupon promotions from Unique. (Tr. 58, 81-82, 237-39, 301; PX 35).

48. Defendants argue that Unique's loss figure is erroneous because: (1) there was no showing of causation, e.g., Unique would not have made the sales; (2) the calculation of damages is unsupported and based on speculative and improper analysis; and (3) there is no evidentiary support for including the sale of collateral goods in the loss figure.

49. The Court agrees with Defendants. Plaintiff has failed to provide the Court with evidence that satisfies the Panduit test for lost profit analysis. See *Panduit*, 575 F.2d at 1156.

Mr. Ulankiewicz's analysis of lost profits does not provide a reasonable or reliable basis of measuring damages in this matter. In particular, there are serious questions regarding the verifiability of the loss figure and the data used by Mr. Ulankiewicz. Unique provided no financial statements, no details of cost items or actual revenues, and no documentation demonstrating existing inventory levels during the period of infringement. Indeed, as Defendants have pointed out, the only documentation provided in support of Mr. Ulankiewicz's analysis are three unaudited [\*41] summaries of accounting reports. The figures extracted from the summaries do not represent the type of data from which comprehensive and reliable damage calculations can be made. Based on this record, Unique's lost profit analysis is speculative at best.

50. The Court cannot blindly use Unique's measure of patent infringement damages. Against this background the Court finds that applying a lost profits analysis to assess Unique's damages for the patent infringement is inappropriate.

51. Unique is therefore not entitled to lost profits on the sale of the Northfield Model 1600 or on coupons or

labelers. Accordingly, on the evidence presented at trial, the only basis for determining damages is reasonable royalties.

#### B. Reasonable Royalty

52. [HN16] To the extent that the patent holder cannot establish that a given sale would have been made but for the infringement, the patent holder is entitled to at least a reasonable royalty. See *Panduit*, 575 F.2d at 1157.

53. A royalty is a payment made to the owner of a patent by a non-owner in exchange for rights to make, use or sell the claimed invention. The reasonable royalty analysis creates a hypothetical licensing negotiation [\*42] between a willing licensor and a willing licensee and determines, based upon this, what a reasonable royalty would have been agreed to. See *Stickle v. Heublein, Inc.*, 716 F.2d 1550, 1561 (Fed. Cir. 1983). The parties are presumed to be reasonable and prudent businesspersons who are trying to reach an agreement. See *Georgia-Pacific Corp. v. United States Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970).

54. In *Georgia Pacific*, fifteen evidentiary factors are listed that are relevant to the determination of a reasonable royalty; the court may exercise its discretion in evaluating those factors. The Federal Circuit has approved this approach. See, e.g., *Railroad Dynamics Inc. v. A. Stucki Co.*, 727 F.2d 1506, 1518 (Fed. Cir. 1954); *Hanson v. Alpine Valley Ski Area, Inc.*, 718 F.2d 1075, 1077 (Fed. Cir. 1983).

[HN17] The fifteen *Georgia-Pacific* factors are: (1) current, established royalty rates under the patent at issue; (2) royalty rates for comparable technology; (3) scope, exclusivity, and restrictiveness of a retroactive license; (4) the patent holder's established licensing and marketing practices; (5) commercial/competitive [\*43] relationship of licensor and licensee; (6) derivative/conveyed sales of unpatented, accompanying materials by patentee and competitors; (7) duration of patent and license terms; (8) profitability and commercial success of invention; (9) utility and advantages of invention over prior art; (10) nature, character, and benefits of use; (11) extent and value of infringing use; (12) allocation of a portion of profits or sales for use of invention; (13) portion of realizable profits creditable to the invention alone; (14) expert testimony on royalty rates; and (15) the totality of other intangibles impacting a hypothetical negotiation between a willing licensor and licensee. See *Georgia-Pacific*, 318 F. Supp. at 1120.

55. [HN18] "Where an established royalty exists, it will usually be the best measure of what is a 'reasonable' royalty" for the purpose of calculating damages when the record does not permit actual damages to be credibly



determined. *Nickson Indus., Inc. v. Rol Mfg. Co., Ltd.*, 847 F.2d 795, 798 (Fed. Cir. 1988); *Del Mar Avionics*, 836 F.2d at 1328.

56. At trial, Ms. Witt testified that had she licensed the patents in suit to the Defendants [\*44] during the infringing period she would have charged, at a minimum, \$ 30,000 for each machine; 100% of the price of a US301 coupon inserter. (Tr. 574-77). In deciding what royalty to charge, Ms. Witt states that she considered "the profits of the equipment, the income or profits of the collateral pieces, and the . . . potential rental of that equipment should it be on rental basis." (Tr. 577).

57. Defendants presented evidence of a patent license agreement, on the licensed device, that Ms. Witt granted to Unique. In that license agreement, a license fee of \$ 27,000 a year was charged for the '901 patent, based on a projected \$ 7 million in sales. (JX 23, Tr. 580-81). Additionally, the agreement contains a royalty schedule, whereby a royalty on net sales is paid each calendar year on a "sliding scale" basis. (JX 23). The highest royalty under the agreement is a royalty rate of fifteen percent (15%), while the lowest is a royalty rate of eight percent (8%). (JX 23).

58. This Court concludes that reasonable royalty damages based on the formula provided by the established royalty agreement between Ms. Witt and Unique are adequate to compensate Unique for infringement. Accordingly, Unique [\*45] is granted royalty damages of \$ 27,000 as a license fee, as well as a royalty rate of eight percent (8%) of Northfield's gross sales of the Northfield Model 1600.

The Court further concludes that Unique has not sufficiently proven that it can normally anticipate the sale of collateral goods together with the sale of its coupon inserters. See *King Instrument*, 767 F.2d at 865. In other words, Unique has failed to establish that it would have made the sale of the collateral goods "but for" Defendants' infringement. See *id.* at 866. Accordingly, the Court declines to award reasonable royalties on the sale of collateral goods.

#### V. Prejudgment Interest

59. [HN19] When patent infringement has been found and damages determined, an award of prejudgment interest on the damages is the rule, not the exception. See *General Motors Corp. v. Devex Corp.*, 461 U.S. 648, 656-57, 76 L. Ed. 2d 211, 103 S. Ct. 2058 (1983). Prejudgment interest helps ensure that the patent holder is adequately compensated for the infringement and for the foregone use of the money from the date of the injury to the date of the judgment. See *Oiness v. Walgreen Co.*, 88 F.3d 1025, 1033 (Fed. Cir. 1996). [\*46] The court is afforded wide latitude in its selection

of the appropriate interest rate to be applied, and a rate above the prime rate may be used. See *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 939 F.2d 1540, 1545 (Fed. Cir. 1991). Prejudgment interest is to be awarded from the date infringement began to the date of judgment. See *Nickson Indus., Inc.*, 847 F.2d at 800.

60. Unique is entitled to prejudgment interest based upon the prevailing prime rates during the period of infringement. Unique presented sufficient evidence of the prevailing Baa corporate bond rate for the infringing dates. Accordingly, this Court awards prejudgment interest at the rate of 8.05% for 1996; 7.87% for 1997; and 7.27% for 1998; to be compounded yearly from the date of the first infringing sale of the Northfield 1600 made by Northfield to Menasha.

#### VI. Attorney's Fees

61. Both sides claim attorney's fees pursuant to 35 U.S.C. § 285. The statute calls for the case to be "exceptional" to justify an award of attorney's fees.

62. The Court has carefully considered all of the circumstances of this case and the general principles of applicable law and concluded [\*47] that each party should bear its own attorney's fees.

63. Here, Unique prevailed on its doctrine of equivalents claim only. The Court has found Unique's patents valid and infringed, and has awarded substantial damages measured by a reasonable royalty and interest. No exceptional circumstances remain to justify an award of attorney's fees to Unique.

#### VII. Costs

64. Unique is entitled to recover its costs other than attorney's fees.

#### CONCLUSION

AND NOW, this 30th day of August 1999, following the conclusion of a bench trial in this matter, and in accordance with the foregoing Findings of Fact and Conclusions of Law, it is HEREBY ORDERED as follows:

1. Defendants Menasha and Northfield are PERMANENTLY ENJOINED from infringing United States Patent No. 5,588,280 and United States Patent No. 5,079,901 by the manufacture, use and/or sale of coupon inserters embodying the claimed bursting function pursuant to 35 U.S.C. § 283.

2. Defendants Menasha and Northfield are liable to Unique for reasonable royalties amounting to a \$ 27,000 license fee, and reasonable royalty rate of eight percent (8%) of Northfield's gross sales of the Northfield Model 1600, plus [\*48] prejudgment interest at the rates set



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forth above. The parties are instructed to submit a detailed written presentation as to the amount Northfield's gross sales total, as well as when Northfield's first infringing sale to Menasha was made. Presentations shall be submitted on or before October 1, 1999.

3. No attorney fees are awarded in this action.

4. Defendants' Motion for Directed Finding at the Conclusion of Plaintiff's Case is DENIED.

5. Defendants' Rule 52(c) Motion for Judgment as a Matter of Law on Infringement Under the Doctrine of Equivalents is DENIED.

6. These Findings of Fact and Conclusions of Law will be supplemented after presentations have been submitted as set forth in paragraph 2 above.

7. Final Judgment shall enter after a final amount of damages is calculated as set forth above.

IT IS SO ORDERED.

DATED: August 30, 1999.

SAMUEL P. KING

United States District Judge